Getting Started with Attunity Connect

Accessing Data

Version 4.1

ATTUNITY

Getting Started with Attunity Connect

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Introduction

This document describes the following tasks:

- How to install Attunity Connect on Windows 98/Me/NT/2000/XP.
- How to install Attunity Studio to manage Attunity Connect.
- How to set up access to data sources, including in a server machine.
- How to connect to more than one data source in a single SQL statement.

Installing Attunity Connect on Windows Platforms

To set up Attunity Connect on any Windows platform, make sure you have the following:

- 128 MB memory (256 MB is recommended)
- 40 MB free disk space
- Microsoft Windows '98.
- Microsoft Windows NT Server Version 4.0.1 with service pack 5 or higher.
- Microsoft Windows 2000 with service pack 2 or higher.
- Microsoft Windows 2003.
- Microsoft Windows XP.
  - When installing on Windows XP, you cannot specify a logical drive as the Destination folder for the installation.
- The Microsoft Data Access Components (MDAC) version 2.0 or higher (available from http://www.microsoft.com/data).

▶ **To install Attunity Connect under Windows:**

1. Run the Attunity Connect installation file that you downloaded from the web or from an Attunity Connect installation CD-ROM.
2. Register the copy of Attunity Connect: Run the following from the Start menu: **Start|Programs|Attunity|Attunity Connect Environment Prompt|Default (Using JDBC 2)**.
3. At the DOS prompt run:

   `NAV_UTIL register` *`path`*`\license.txt`

   ❖ where license.txt is a file received from Attunity or one of its partners.

▶ **To install Attunity Studio:**

■ Run the AttunityStudioV1.2.exe file.

Using Attunity Studio

Setting Up Access to the Client Machine to Access Data

Use the following procedures to set up access to data.

Setting Up Access to a Machine

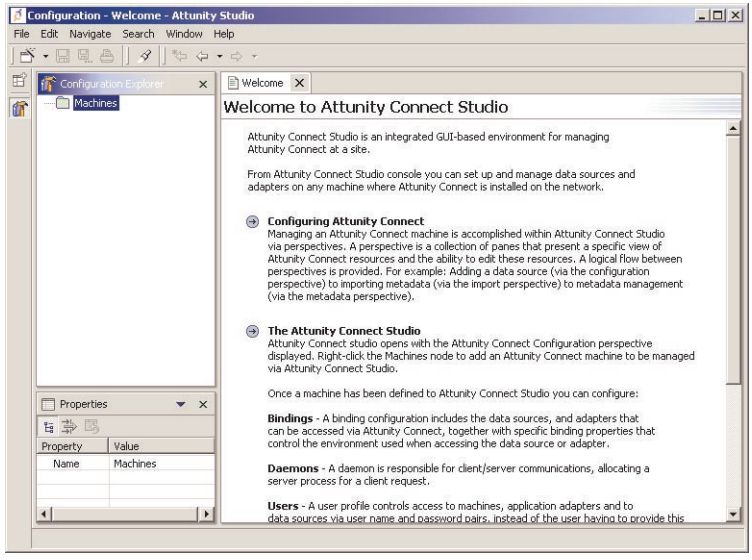
❖ The following procedures assumes:

- You have permission to access the server machine.
- The Attunity Connect daemon is running on every machine used in this tutorial.

Check with the system administrator to ensure these requirements are fulfilled.

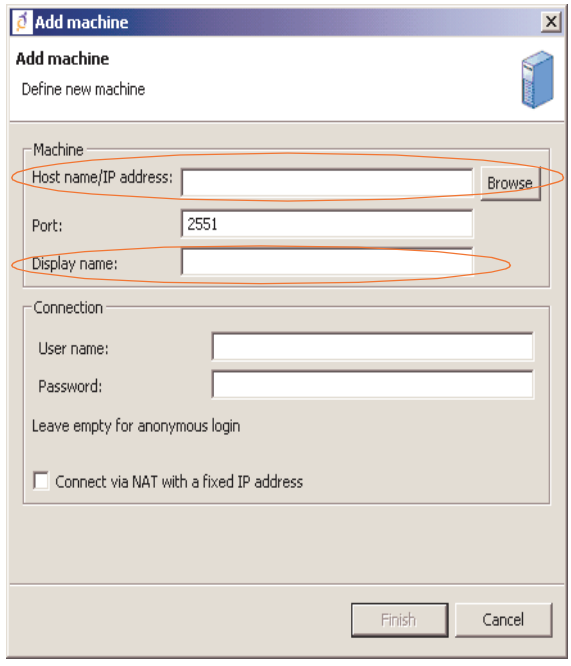
▶ **To add a machine:**

1. Open Attunity Studio by selecting **Start | Programs | Attunity | Studio1.2**.



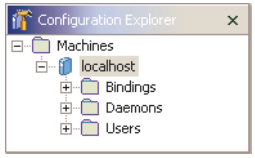
2. Right-click Machines in the Configuration explorer and select Add Machine.

The Add Machine window is displayed:



3. Click the **Browse** button and select the client machine (the machine you are working on) from the list of machines which have Attunity Connect running on the displayed port.
   - ❖ The client machine set here is the machine where the application runs.
4. Optionally, enter an alias for the machine in the Display name field. For example, you can change the name to localhost.
5. Leave the Username and Password fields empty to connect anonymously.
   - ❖ On Windows machines, Anonymous connection is the default.
6. Click **Finish**.

The machine now appears in the Configuration Explorer tree.



Every Attunity Connect machine has the following areas that can be configured:

Binding configuration – The binding configuration lists the data sources and application adapters that reside on the machine.

Daemon configuration – The daemon configuration controls client server communication.

User configuration – The user configuration manages runtime authorization rights to access data sources, application adapters and remote machines from the client machine.

Setting Up Access to Data

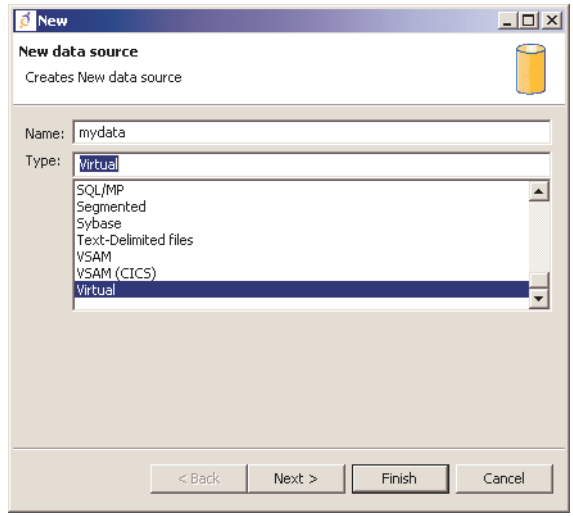
To access a data source, you need to define the data source in the binding configuration.

NAV is the default binding configuration for Attunity Connect. You can use this configuration to define all the data sources and adapters you want to access via Attunity Connect. You can also create a new binding configuration.

▶ **Setting up access to a data source:**

1. Create a new directory on the server machine where the data source resides. This directory will be used to store new data that you will create as part of this tutorial. The directory used in this example is called *mydata*.
   - ❖ Although the process described here is valid for all supported platforms, for simplicity, the Windows platform is used in the example.
2. Expand Bindings under the machine in the explorer tree.
3. Expand the NAV binding. The binding contains branches for data sources, adapters and events.
4. Right-click Data sources and select New Data source.

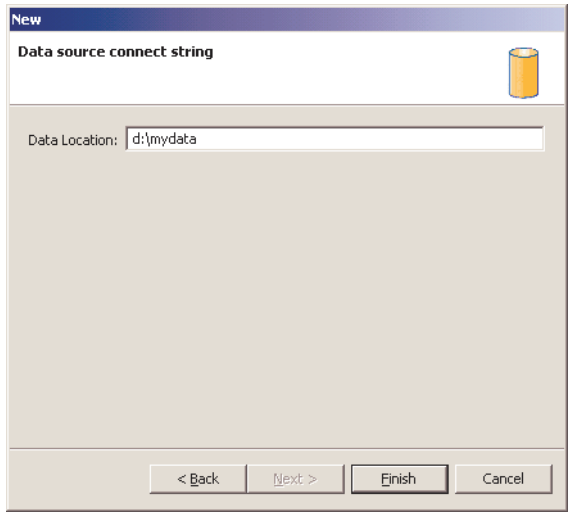
5. In the New data source wizard, enter a name for the data source and select Virtual as the data source type.



Virtual is an Attunity Connect virtual data source. You can use this data source on any machine, regardless of what data sources are registered for use by Attunity Connect.

6. Click **Next**.

7. Enter connection details for the data source. Enter the full path where files and indexes you create with CREATE TABLE statements are stored.
   - ❖ The directory specified (in the example d:\mydata) **must** exist on the machine in order to create tables for the data source.



8. Click **Finish**.

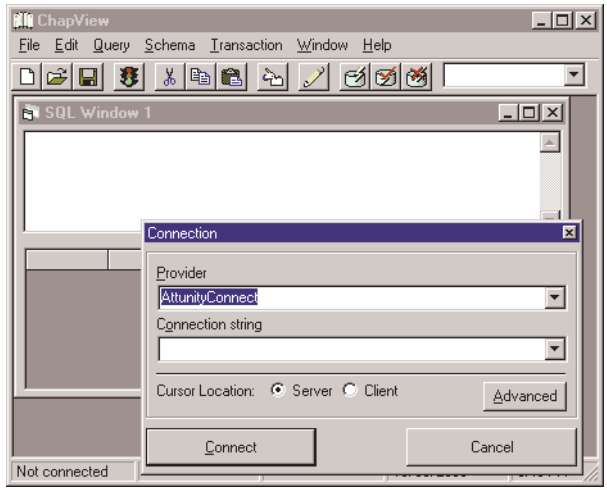
The data source is now displayed in the Configuration explorer tree.

Testing a Connection

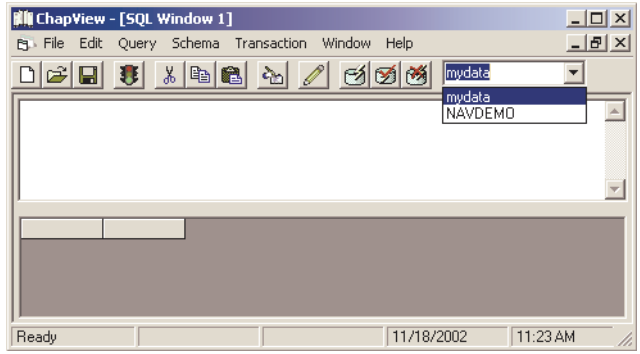
▶ **To connect to the data using the demo ADO application:**

1. Start the demo ADO application by selecting **Start|Programs|Attunity|Demos|Demo ADO Application**.

The Attunity Connect demo ADO application opens displaying a Connection screen:



2. Click **Connect** to connect to Attunity Connect as the data provider.
3. Select the mydata as the data source you want to test.



4. In the SQL Window, enter the following SQL:

```
create table tutorial (id integer, lastname
varchar(20) not null, firstname varchar(20) not
null)
```

   - ❖ No message is returned stating that the statement was executed successfully. If you try to execute the statement a second time, you receive an error (since the table already exists).
   - ❖ The CREATE TABLE statement also creates the necessary metadata for the table in Attunity Connect.

5. Click  to execute the SQL.

6. Enter a row to the table. For example:

   ```
   insert into tutorial values(1, 'white', 'julian')
   ```

   Click  to execute the statement.

   ❖ When the execution is successful no message is displayed.

7. Enter more rows to the table. For example:

   ```
   insert into tutorial values(2, 'black', 'stuart')
   insert into tutorial values(3, 'brown', 'alan')
   ```

   Click  after each insert statement.

8. Use a SELECT statement to check that the data was entered correctly:

   ```
   select * from mydata:tutorial
   ```

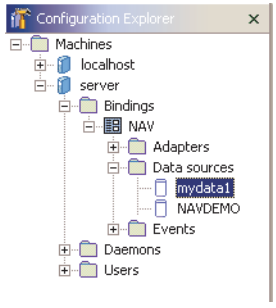
9. Click  to execute the statement.

Setting Up Access to Data on a Server Machine

1. Add the server machine as you added the client machine in "Setting Up Access to a Machine", at the beginning of the tutorial.

   ❖ The client machine is where the application runs and the server machine is where the data source resides. Every machine is added in the same way to Attunity Studio, except that non-Windows machines might require a username and password, depending on whether this was specified during the installation (the default is that anyone can initially administer a machine from Attunity Studio).

2. Add a data source, called mydata1, to the server machine as you did in "Setting Up Access to Data", above.



Once the server machine and data on it are set, you can access it from the client machine.

▶ **To access data on a server machine via the client machine:**

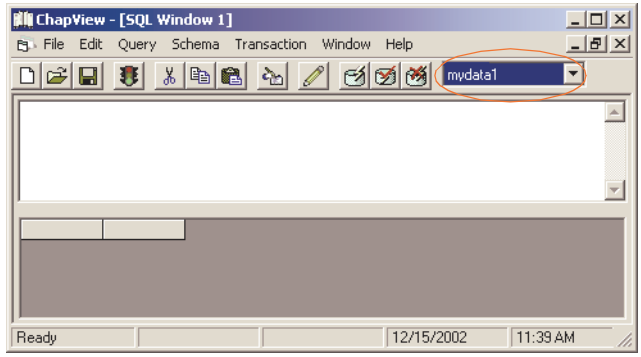
1. Select the mydata1 data source and drag-and-drop it to the Data sources node on the client machine.
2. Choose Create Shortcut from the popup menu.

The data source shortcut is displayed in the Configuration explorer under client machine.

Testing the Data Source Shortcut

▶ **To connect to the data source on the server machine:**

1. In the demo ADO application, select mydata1 as the data source you want to test.



2. In the SQL Window, enter an SQL CREATE TABLE statement to create a new table to the data source you specified as mydata1, as follows:

```
create table tutorial1 (id integer, lastname
varchar(20) not null, firstname varchar(20) not null)
```

   - ❖ No message is displayed if the execution is successful.
   - ❖ The CREATE TABLE statement also creates the necessary metadata in Attunity Connect for the table.

3. Click  to execute the SQL.
4. Enter rows to the table. For example:

```
insert into tutorial1 values(1, 'brown', 'betty')
insert into tutorial1 values(2, 'smith', 'steve')
insert into tutorial1 values(3, 'williams', 'bill')
```

   - ❖ No message is displayed if the execution is successful.

Click  after each select statement.

5. Use a SELECT statement to check that the data was entered correctly. For example:

   ```
   select * from mydata1:tutorial1
   ```

6. Click  to execute the statement.

Connecting to Multiple Data Sources in a Single SQL Statement

To connect to multiple data sources in a single SQL statement, identify the data sources in the SQL statement by using the names assigned to them in Attunity Connect. In this example mydata and mydata1. Separate the data source name and the table name with a colon (:).

The following example joins the tutorial table from mydata to mydata1 in tutorial1. The id field value is taken from the tutorial table and the lastname from the tutorial1 table.

```
select tutorial.id, tutorial1.lastname
  from mydata:tutorial,
       mydata1:tutorial1
```